

A. Journal Articles

1. Alimardani M.* , Toyserkani E.* , Huissoon J.P.* , Paul C.P.
On the delamination and crack formation in a thin wall fabricated using laser solid freeform fabrication process: an experimental-numerical investigation
Optics and Lasers in Engineering 47, 1160-1168 (2009)
2. Arora P., Chattopadhyay M.K., Roy S.B.
Magnetic properties and large magnetocaloric effect of DyPt₂
Journal of Applied Physics 106, (2009)
3. Arora, P., Tiwari P., Sathe V.G., Chattopadhyay M.K.
Magnetocaloric effect in DyCu₂
Journal of Magnetism & Magnetic Materials 321, 3278-84 (2009)
4. Babu Reddy J.N.* , Elizabeth S.* , Bhat H.L.* , Karnal A.K.
Development of a versatile high temperature top seeded solution growth unit for growing cesium lithium borate crystals
Review of Scientific Instruments 80, (2009)
5. Bakshi A.K., Dhabekar B. Rawat N.S.* , Singh S.G.* , Joshi V.J.* , Kumar Vijay*
Study on TL and OSL characteristics of indigenously developed CaF₂ phosphor
Nuclear Instruments and Methods in Physics Research Section 267, 548-53 (2009)
6. Balamurugan S.* , Ramasamy P.* , Sharma S.K., Inkong Y.* , Manym P.*
Investigation of SR method grown (001) directed KDP single crystal and its characterization by high-resolution X-ray diffractometry (HRXRD), laser damage threshold, dielectric, thermal analysis, optical and hardness studies
Materials Chemistry and Physics 117, 465-470 (2009)
7. Banerjee Arup
Dipole oscillations of a Bose-Fermi mixture: effect of unequal masses of Bose Bose and Fermi particles.
Journal of Physics B: Atomic, Molecular & Optical Physics 42, 235301-1-6 (2009)
8. Bartwal K.S., Ryu H.* , Brik M.G.* , Sildos I.*
Photoluminescence in Mg_xSr_{1-x}Al₂O₄: Eu²⁺, Nd³⁺ and electron-vibrational interaction in the Eu²⁺ 5d states
Physica B 404, 3440-3444 (2009)
9. Bartwal K.S., Ryu H.* , Brik M.G.* , Sildos I.*
Studies of electron-vibrational interaction and crystal field splitting in 5d states of Eu²⁺ in CaAl₂O₄ co-doped with Eu²⁺ and Er³⁺
Journal of Physics D: Applied Physics 42, 245401-1-5 (2009)
10. Begum G.* , Dube A. Joshi P.G.* , Gupta P.K., Joshi N.B.*
Chlorin p⁶ preferentially localizes in endoplasmic reticulum and Golgi apparatus and inhibits Ca²⁺ release from intracellular store
Journal of Photochemistry and Photobiology 95, 177-84 (2009)
11. Bhawsar V., Arya R., Oak S.M.
Automation control and interface for diode-pumped solid-state lasers with adjustable parameters
Journal of Instrument Society of India 39, 253-255 (2009)
12. Borage M., Nagesh K.V.* , Bhatia M.S.* , Tiwari S.
Characteristics and design of an asymmetrical duty-cycle-controlled LCL-T resonant converter.
IEEE Transactions on Power Electronics 24, 2268-75 (2009)
13. Chaliha R.S.* , Annapurna K.* , Tarafder A.* , Tiwari V.S., Gupta P.K., Karmakar B.*
Luminescence and dielectric properties of nano-structured Eu³⁺K₂O Nb₂O₅-SiO₂ glass ore ceramics
Solid State Communications 11, 1325-32 (2009)



14. Chatterjee S., Pavan Kumar Y.
Polarization phase-shifting Fizeau interferometer with a cyclic path optical configuration
Optical Engineering 48, 115601-1-6 (2009)
15. Chattopadhyay M.K., Arora P., Roy S.B.
Magnetic properties of the field-induced ferromagnetic state in MnSi
Journal of Physics: Condensed Matter 21, 296003-1-5 (2009)
16. Das A.K., Misra P., Kukreja L.M.
Effect of Si doping on electrical and optical properties of ZnO thin films grown by sequential pulsed laser deposition
Journal of Physics D: Applied Physics 42, 165405-1-7 (2009)
17. Das K., Uppal A., Jain B., Bose B., Gupta P.K.
Light induced toxicity of merocyanine 540-silica nanoparticle complex
Journal of Nanoscience and Nanotechnology 9, 5642-5 (2009)
18. Dhaka R.S.*, D'Souza S.W.*, Maniraj M.*, Chakrabarti A., Schlage D.L.*, Lograsso T.A., Barman S.R.
Photoemission study of the (100) surface of Ni₂MnGa and Mn₂NiGa ferromagnetic shape memory alloys
Surface Science 603, 1999-04 (2009)
19. Ganeev R.A.*, Singhal H., Naik P.A., Kulagin I.A., Redkin P.V., Chakera J.A., Tayyab M., Khan R.A., Gupta P.D.
Enhancement of high-order harmonic generation using a two color pump in plasma plumes
Physical Review A 80, 033845-1-8 (2009)
20. Ganeev R.A.*, Singhal H., Naik P.A., Chakera J.A., Srivastava A.K., Dhama T.S., Joshi M.P., Gupta P.D.
Influence of C60 morphology on high-order harmonic generation enhancement in fullerene-containing plasma
Journal of Applied Physics 106, 103103-1-7 (2009)
21. Ganeev R.A.*, Singhal H., Naik P.A., Chakera J.A., Tayyab M.*, Baba M.*, Kuroda H.*, Gupta P.D.
Variation of harmonic spectra in laser-produced plasmas at variable phase modulation of femtosecond laser pulses of different bandwidths
Journal of the Optical Society of America B 26, 2143 (2009)
22. Ganesh P., Kaul R., Mishra S., Bhargava P., Paul C.P., Singh P., Tiwari P., Oak S.M., Prasad R.C.*
Laser rapid manufacturing of bi-metallic tube with Stellite-21 and austenitic stainless steel
Transactions of The Indian Institute of Metals 62, 169-74 (2009)
23. Ganguli T., Mazher J.*, Polian A.*, Deb S.K., Pages O.*, Firszt F.*
An EXAFS study of the structure of the Zn_{1-x}Be_xSe alloy system
Journal of Physics: Conference Series 190, 012064-1-4 (2009)
24. George J., Seihgal S., Oak S.M., Mehendale S.C.
Beam quality degradation of a higher order transverse mode beam due to spherical aberration of a lens
Applied Optics 48, 6202-06 (2009)
25. Ingale A., Mishra Shramana*, Roy U.N.*, Tiwari P., Kukreja L.M.
Structural and particulate to bulk phase transformation of CdS film on annealing: a Raman spectroscopy study
Journal of Applied Physics 106, 084315-1-9 (2009)
26. Jain B., Uppal A., Gupta P.K., Das K.
Spectroscopic investigations on the binding of the photosensitizer chlorin p6 with amine-modified silica nanoparticles in aqueous media
Photochemistry and Photobiology 85, 927-33 (2009)
27. Kailath B.J.*, DasGupta A.*, DasGupta N.*, Singh B.N., Kukreja L.M.
Growth of ultra-thin SiO₂ by laser-induced oxidation



- Semiconductor Science & Technology* 24, 105011-6 (2009)
28. Kamal C., Ghanty T.K.*, Banerjee A., Chakrabarti A.
The van der Waals coefficients between carbon nanostructures and small molecules: A time-dependent density functional theory study
Journal of Chemical Physics 131, 164708-1-11 (2009)
29. Kar S, Verma S., Shaikh M.W.*, Bartwal K.S.
Effect of proton exchange and annealing on diffraction efficiency of Fe:LiNbO₃ crystals
Physica-B 404, 3507-3509 (2009)
30. Kar S, Verma S., Khan M.S.* , Bartwal K.S.
Growth and optical homogeneity investigations on Fe and Fe:Mn codoped LiNbO₃ crystals
Crystal Research & Technology 44, 1303-1307 (2009)
31. Kaul R., Parvathavarthini N.* , Ganesh P., Mulki S.V.* , Samajdar I.* , Dayal R.K.* , Kukreja L.M.
A novel preweld laser surface treatment for enhanced intergranular corrosion resistance of austenitic stainless steel weldments.
Welding Journal 8812, 233-1-10 (2009)
32. Khare R., Shukla P.K., Mishra G.K., Mukherjee C., Talwar S., Dubey V.K., Saxena P., Mittal J.K.
A novel confocal optical pulse stretcher for laser pulses
Optics Communications 282, 3850-53 (2009)
33. Kukreja L.M., Das A.K., Misra P.
Studies on nonvolatile resistance memory switching in ZnO thin films
Bulletin of Material Science 32, 247-252 (2009)
34. Kumar V., Kim Kwang-Je*
Electron beam requirements for Smith-Purcell backward wave oscillator with external focusing
Physical Review Special Topics - Accelerators and Beams 12, 070703-1-7 (2009)
35. Kumar V.
Understanding the focusing of charged particle beams in a solenoid magnetic field.
American Journal of Physics 77, 737-41 (2009)
36. Kuroda D.G.* , Singh C.P., Peng Z.* , Kleiman V.D.*
Mapping excited-state dynamics by coherent control of a Dendrimer's photoemission efficiency
Science, 326(5950), 2009(Oct.): 263-67
37. Majumdar J.D.* , Manna I.* , Kumar A.* , Bhargava P., Nath A.K.*
Direct laser cladding of Co on Ti--Al-4V with a compositionally interface
Journal of Materials Processing Technology 209, 2237-2243 (2009)
38. Manhas S., Swami M.K., Patel H.S., Uppal A., Ghosh N., Gupta P.K.
Polarized diffuse reflectance measurements on cancerous and noncancerous tissues
Journal of Biophotonics 2, 581-87 (2009)
39. Modi M.H., Rai S.K., Thomasset A.* , Lodha G.S., Idir M.*
Effect of surface roughness on multilayer film growth
The European Physical Journal 168, 27-32 (2009)
40. Modi M.H., Mercere P.* , Idir M.*
High precision surface metrology using a phase retrieval method
Journal of Physics: Conference Series 186, 012068-1-3 (2009)
41. Mondal P., Manekar M., Srivastava A.K., Roy S.B.
Bulk critical state and fundamental length scales of superconducting nanocrystalline Nb₃Al in Nb-Al matrix
Physical Review B 80, 024502-1-8 (2009)
42. Pandit P., Satapathy S., Gupta P.K., Sathe V.G.
Effect of coalesce doping of Nd and La on structure, dielectric, and magnetic properties of BiFeO₃
Journal of Applied Physics 106, 114105-1-7 (2009)



43. Pavan Kumar, Y., Chatterjee S.
Simultaneous measurement of refractive index and wedge angle of optical windows using Fizeau interferometry and a cyclic path optical configuration
Applied Optics 48, 4756-61 (2009)
44. Prasad N.V.*, Subraymanyam J.*, Murty P.N.*, Karmakar S.*, Gupta S.M.
Impedance measurements on PZT and $\text{La}_{0.75}\text{Bi}_{3.25}\text{Ti}_3\text{O}_{12}$ ceramics
International Journal of Modern Physics B 23, 3881-93 (2009)
45. Ram Sankar P., Tiwari P., Kumar R., Ganguli T., Mukherjee C., Srivastava A.K., Oak S.M., Pathak R.K.*
Synthesis and characterization of cadmium selenide nanostructures on porous aluminum oxide templates by high frequency alternating current electrolysis
Applied Surface Science 256, 2097-2103 (2009)
46. Rao B. Tirumala, Ittoop M.O., Kukreja L.M.
A power ramped pulsed mode laser piercing technique for improved CO_2 laser profile cutting.
Optics & Lasers in Engineering 47, 1108-16 (2009)
47. Roy G.B.
Synthesis and study of physico-chemical properties of a new chiral Schiff base ligand and its metal complex.
Inorganica Chimica Acta 362, 1709-14 (2009)
48. Roy S.B., Myneni G.R.*, Sahni V.C.
The influence of chemical treatments on the superconducting properties of technical niobium materials and their effect on the performance of superconducting radio frequency cavities
Superconductor Science Technology 22, 105014-1-6 (2009)
49. Ryu H.*, Bartwal K.S.
Doping optimization of Eu and Ho activator ions in polycrystalline CaAl_2O_4
Journal of Alloys and Compounds 480, 966-69 (2009)
50. Ryu H.*, Singh B.K.*, Kityk I.V.*, Bartwal K.S.
Growth of multiwalled carbon nanotubes on Cu/MgO and their features
Advances in Condensed Matter Physics, 71-80 (2009)
51. Sharma A., Abdurrahim Shri, Ghodke A.D., Singh G.
Optics design and second order longitudinal dispersion minimization in a bunch compressor transfer line for CTF3
Nuclear Instruments & Methods in Physics Research: Section A 602, 342-51 (2009)
52. Sharma T.K., Jangir R., Porwal S., Kumar R., Ganguli T. Zorn M.*, Zeimer U.*, Bugge F.*, Weyers M.*, Oak S.M.
Compositional dependence of the bowing parameter for highly strained InGaAs/GaAs quantum wells
Physical Review B 80, 165403-1-11 (2009)
53. Singh B., Subramaniam V.V., Daultabad S.R., Chakraborty A.
Efficient, high rep rate, large-bore kinetically enhanced copper vapor laser with low (<1 kW/l) specific input power using new thermal assembly
Review of Scientific Instruments 80, 106102-1-3 (2009)
54. Singh Gurvinderjit, Tiwari V.S.
Effect of Zr concentration on conductivity behavior of (1x)PMN-xPZ ceramic: An impedance spectroscopy analysis
Journal of Applied Physics 106, 124104-1-8 (2009)
55. Singh Gurvinderjit, Tiwari V.S., Sharma T.K., Gupta P.K.
Temperature dependence photo-luminescence of Nd^{3+} doped PLZT ceramic
Journal of Electroceramics, 10832-009-9593-8 (2009)
56. Singh N., Vora H.S.
Influence of buffer gas pressure on the spectral width of the 510.6-nm line of an atomic copper vapor laser



- Optical Engineering* 48, 094201-1-7 (2009)
57. Sisodia N.*, Trivedi R.*, Sen P.K.*, Bartwal K.S., Sen P.*
Theory of third-order optical susceptibility in magnesium doped lithium niobate crystal
Nonlinear Optics, Quantum Optics 39, 341-353 (2009)
58. Sreekumar G.*, Louie Frobel P.G.*, Muneera C.I.*, Sathiyamoorthy K.*, Vijayan C.*, Mukherjee C.
Saturable and reverse saturable absorption and nonlinear refraction nanoclustered Amido Black dye-polymer films under low power continuous wave He-Ne laser light excitation
Journal of Optics A: Pure and Applied Optics 11, 125204-1-1 (2009)
59. Tiwari M.K., Sawhney K.J.S.*, Lee Tien-Lin*, Alcock S.G.*, Lodha G.S.
Probing the average size of self-assembled metal nanoparticles using x-ray standing waves
Physical Review B 80, 035434-1-5 (2009)
60. Verma S., Muralidhar K.*
Imaging convection, concentration and surface micromorphology during crystal growth from solution using optical diagnostics
Recent Research Developments in Crystal Growth 5, 141-314 (2009)
61. Vinod K.*, Varghase N.*, Roy S.B., Syamaprasad U.*
Significant enhancement of the in-field critical current density of the MgB₂ superconductor through codoping of nano-TiC with nano-SiC
Superconductor Science & Technology 22, 055009-1-9 (2009)
62. Viswanathan A.*, Sastikumar D.*, Kumar Harish, Nath A.K.*
Formation of WC-iron silicide (Fe₅Si₃ composite clad layer on AISI 316L stainless steel by high power (CO₂) laser
Surface & Coatings Technology 203, 1618-23 (2009)
63. Wang W.*, Yu W.*, Yu M.Y.*, Senecha V.K., Xu H.*, Wang J.W.*, Yuan X.*, Sheng Z.M.*
Efficient acceleration of a small dense plasma pellet by consecutive action of multiple short intense laser pulses
Laser and Particle Beams 27, 629-634 (2009)



B. Invited Talks

1. Bapna S.C.
750 keV DC accelerator facility safety aspects & applications
18th National Symposium on Radiation Physics (NSRP-18), Udaipur, 19-21 November 2009
2. Bindra K.S.
Ultrafast optical parametric amplifiers
National BRNS Theme Meeting on Widely Tunable Optical Parametric Oscillators Mumbai, 28-29 August 2009
3. Chakera J.A.
Higher harmonic generation using nano-structured target plumes
Laser Extreme Interaction LEO- 2009, Brasov, Romania, October 2009
4. Ghosh H.
Nonlinear optical properties of strongly correlated electron systems
University of Guwahati, Guwahati, November 2009
5. Ghosh H.
Nonlinear optical properties of one dimensional Mott-Hubbard insulators
North Eastern Hill University (NEHU), November 2009
6. Haridas.G.
Experimental determination of Bremsstrahlung and Synchrotron radiation dose at SR beam lines of 2.5 GeV Indus-2 SRS
National Symposium on Radiation Physics-18, Udaipur, 2009
7. Joshi M.P.
Physics of polymer based optoelectronic devices
Homi Bhabha Centenary BRNS-GND University Workshop on Molecular/Organic Electronic Devices (MOED-2009), Amritsar, 22-25 September 2009
8. Kukreja L.M.
Pulsed laser deposition of Silicon nano-particles and their characterization
DAE-BRNS 5th National Symposium on Pulsed Laser Deposition of Thin Films and Nanostructured Materials, Chennai, 2-4 December 2009
9. Kukreja L.M.
Morphological and optical properties of Si-nanoparticles grown by pulsed laser deposition
Applied Physics Seminar, Karlsruhe, Germany, 30 October 2009
10. Kukreja L.M.
Silicon nanoparticles: mysteries about light emission
International Conference on Advanced Nanomaterials and Nanotechnology, Guwahati, 9-11 December 2009
11. Naik P.A.
Radiation physics aspects in ultra-intense laser-plasma interaction
National Conference on Accelerator and Low Level Radiation Safety, Delhi, November 2009
12. Naik P.A.
Recent results in high order harmonic generation from plasma plumes
4th Asian Summer School & Symposium on Laser-plasma Acceleration and Radiation, Hsinchu, Taiwan, August 2009
13. Rao B.S.
Intense laser plasma interaction for laser fusion, x-ray lasers and wake-field acceleration
Lasers and their Applications, Vidisha, December 2009
14. Rawat A.
Activities of Computer Centre at RRCAT
DAE-BRNS Seminar on Applications of Computer & Embedded Technology (SACET-09) Kolkata, 28 October 2009

C. Seminars/Conference Presentations

C1. DAE-BRNS 5th National Symposium on Pulsed Laser Deposition of Thin Films and Nanostructured Materials, IIT Madras, Chennai, 2-4 December 2009

1. Ajimsha R.S., Das A.K.* , Singh B.N., Misra P., Kukreja L.M.
Structural, electrical and optical properties of Cr:ZnO thin films grown by buffer assisted pulsed laser deposition
2. Ajimsha R.S., Das A.K., Singh B.N., Misra P., Kukreja L.M.
Studies on Dy doped ZnO thin films grown by buffer assisted pulsed laser deposition
3. Das A.K., Misra P., Ajimsha R.S., Khamari S., Dixit V.K., Kumar R., Ganguly T., Mukharjee C., Oak S.M., Kukreja L.M.
Highly resistive ZnO thin films grown by DC discharge assisted pulsed laser deposition
4. Detty A.P, Singh B.N., Mukharjee C., Kumar R., Ganguli T., Chaturvedi A., Oak S.M., Pillai V.P. Mahadevan *, Kukreja L.M.
Studies on silicon nanoparticles grown at high temperature using pulsed laser deposition
5. Kailath Binsu J.* , DasGupta A.* , DasGupta N.* , Singh B.N., Kukreja L.M.
Laser induced oxidation
6. Kashid R.V.* , Ajimsha R.S., Singh B.N., Misra P., More M.A.* , Kukreja L.M., Joag D.S.*
Enhanced field emission properties of ZnO/SnO₂ micro/nanostructured film on W-tip
7. Kumar P.* , Das A.K.* , Misra P., Kukreja L.M.
Studies on the resistance switching characteristics of ZnO thin films grown by pulsed laser deposition
8. Misra P., Das A.K.* , Kukreja L.M.
Growth and characterization of ZnO based transparent resistive random access memory devices using pulsed laser deposition
9. Shukla V., Bindra K.S.
Synthesis, characterization and optical limiting

studies of Silicon nano-particles synthesized by laser ablation technique

10. Singh B.N., Ajimsha R.S., Das A.K., Kailath B.J, Misra P., DasGupta A., DasGupta N., Kukreja L.M.

Parametric studies on ultra-thin silicon oxynitride films grown by using DC-discharge assisted pulsed laser heating

C2. 24th National Symposium on Plasma Science & Technology, Hamirpur, 8-11 December, 2009

1. Arora V., Naik P.A., Chakera J.A., Singhal H., Tayyab M., Bhat R.K., Gupta P.D.
Bright ultra-short K- x-ray source generated by high intensity femtosecond laser produced plasma
2. Arora V., Chakravarty U., Chakera J.A., Naik P.A., Kumbhare S.R., Srivastava H., Srivastava A., Verma G.D.* , Gupta P.D.
Enhancement of characteristic hard x-rays for a laser based source for mammography
3. Arora V., Chakera J.A., Naik P.A., Tayyab M., Bhat R.K., Gupta P.D.
Single shot, multi-keV x-ray dispersion-less spectrograph based on x-ray CCD for absolute measurement of x-ray flux
4. Arora V., Naik P.A., Chakera J.A., Kumbhare S.R., Tayyab M., Gupta P.D.
X-ray radiation from the rear side of foil target irradiated by ultrashort high intensity laser pulses
5. Barnwal S., Prasad Y.B.S.R., Naik P.A., Chakera J.A., Khan R.A., Gupta P.D.
A novel single-shot time-resolved optical diagnostics for plasma using a chirped laser pulse as probe
6. Chakravarty U., Naik P.A., Bhat R.K., Mukherjee C., Gupta P.D.
Metal nanoparticle formation of various sizes in plasma produced by femtosecond laser pulses
7. Chakravarty U., Arora V., Chakera J.A., Naik P.A., Srivastava H., Tiwari P., Srivastava A., Kumbhare S.R., Gupta P.D.
X-ray emission enhancement in nano-hole



- alumina irradiated by intense Ti: sapphire laser pulses
8. Joshi A.S., Barnwal S., Prasad Y.B.S.R., Naik P.A. Diagnosis of density and self generated magnetic fields in laser produced plasmas from the Faraday rotation using two colour probe : A proposal
 9. Prasad Y.B.S.R., Nigam S., Aneesh K., Naik P.A., Navathe C.P., Gupta P.D. Generation of intense soft x-ray from capillary discharge plasmas
 10. Rao B.S., Moorti A., Naik P.A., Khan R.A., Gupta P.D. Characterization of laser-driven plasma based electron acceleration
 11. Rao B.S., Moorti A., Naik P.A., Bhat R.K., Gupta P.D. Forward Raman scattering driven self-modulation of ultrashort, intense laser pulse and relativistic electron beam generation from under-dense plasma
 12. Singhal H., Ganeev R.A.*, Naik P.A., Chakera J.A., Srivastava A.K., Dhami T.S., Joshi M.P., Khan R.A., Gupta P.D. Enhanced harmonic generation in C-60 containing plasmas
- C3. National Conference on Accelerator and Low Level Radiation Safety, IUAC, New Delhi, 2009**
1. Dev V., Nayak M.K., Verma D., Haridas G., Thakkar K.K., Haridas P., Khare M., Gupta R.K., Marathe R.G., Singh Gurnam Radiation detectors used at electron accelerators at RRCAT
 2. Nayak M.K., Verma D., Dev V., Haridas G., Thakkar K.K., Sharma D.N., Sarkar P.K. Radiological status of Ti-Sapphire laser plasma chamber at RRCAT, Indore
 3. Sahani P.K., Sarkar P.K.*, Singh Gurnam Study of bremsstrahlung spectra by varying incident electron energy, target and target thickness using FLUKA code
 4. Suhane S.K., Haridas G., Nayak M.K., Verma D., Banerjee R.S., Chouksey S., Singh Gurnam Engineering design and development of shielding door and safety shutter for transfer line -3 tunnel of Indus accelerator complex
- C4. Others Seminars/Conference Presentations.**
5. Verma D., Nayak M.K., Sahani P.K., Kumar V., Dev V., Haridas G., Thakkar K.K., Chouksey S., Sarkar P.K.* Estimation of induced radioactivity at Indus accelerator complex
1. Aggarwal R., Ingale A., Pal S., Sharma T.K., Mehnedale S.C., Oak S.M. GaAsP/AlGaAs quantum well: A Raman spectroscopy study
Proceedings of DAE Solid State Physics Symposium, vol. 54, p-763, 2009
 2. Jangir R., Pal S., Ganguli T., Porwal S., Mukherjee C., Rai S.K., Misra P., Kukreja L.M., Oak S.M. Synthesis and characterization of gallium oxide cone-like nano structures grown on GaAs wafer
Proceedings DAE Solid State Physics Symposium 54, 417- (2009)
 3. Ahsan N.*, Paul C.P.*, Pinkerton A.J.*, Kukreja L.M. Porous surface structures by continuous and pulsed laser direct metal deposition for biomedical applications
23rd International Conference on Surface Modification Technologies (SMT-2009) Mamallapuram, 2-5 November 2009
 4. Bartwal K.S., Ryu H.*, Brik M.G.*, Sildos I.* Photoluminescence of Eu²⁺ in long-lasting phosphors and electron-vibrational interaction in the Eu²⁺ 5d states
5th International Symposium on Laser, Scintillator and Nonlinear Optical Materials, Pisa, Italy, 3-5 September 2009
 5. Chakera J.A., Singhal H., Ganeev R.A.*, Naik P.A., Srivastav A.K., Singh A., Chari R., Khan R.A., Gupta P.D. Higher harmonic generation using nano-structured target plumes
Laser Extreme Interaction LEO-2009, Brasov,



Romania, 16-21 October 2009

6. Ghosh H.
Nonlinear optical properties of strongly correlated electron systems
Discussion Meeting on Statistical and Condensed Matter Physics, p. 21, 31st October - 1st November 2009
7. Ghosh H., Chari R.
Stimulated Raman Scattering in one-dimensional Mott-Hubbard Insulators: A novel THz source
International Conference on Emerging Trends in Electronic and Photonic Devices and Systems (ELECTRO-2009), p. 155, 22-24 December 2009, McMillan Advanced Research series
8. Ghosh H., Joshi M.P., Singh M.K., Rajmohan S.
Optical absorption in neutral and cationic TPD : theory and experiment
Homi Bhabha Centenary BRNS-GND University Workshop on Molecular/Organic Electronic Devices (MOED-2009), Amritsar, p - 33, 22-25 September 2009
9. Ibarra-Medina J.* , Pinkerton A.J.* , Paul C.P.
Co-axial laser cladding gas flows and their effects
23rd International Conference on Surface Modification Technologies (SMT-2009) Mamallapuram, 2-5 November 2009
10. Jayabalan J., Singh A., Chari R.
Ultrafast resonant higher-order optical nonlinearities of silver nanoplatelet colloids
Proceedings of the International Conference on Materials for Advanced Technologies (ICMAT-2009), Symposium G: Plasmonics and Applications, Suntec Singapore International Convention & Exhibition Centre, Singapore, pp 13, 28th June - 4th July 2009
11. Kaithwas N.* , Dave M.* , Kar S., Bartwal K.S.
Preparation and characterization of Ce:YAG nanocrystals
Bharatiya Vigyan Sammelan, Indore, 1-3 December 2009
12. Kamal C., Ghanty T.K.* , Banerjee A., Chakrabarti A.
Van der Waals interaction between carbon nanotubes, fullerenes and small atomic clusters
Proceedings of the International Conference on Materials for Advanced Technologies (ICMAT-2009)- Symposium H: Carbon Nanotubes - Synthesis, Characterization and Applications., p19, Singapore, 28th June - 4th July, 2009
13. Kar S., Verma S., Bartwal K.S.
Growth and characterization of Mn doped $\text{Li}_2\text{B}_4\text{O}_7$ crystals
National Symposium on Growth of Detector-Grade Single Crystals, Mumbai, p. 144-145, November 2009
14. Misra P., Ganguli T., Das A.K.* , Kumar R.* , Oak S.M., Kukreja L.M.
Correlation of structural and electrical characteristics of pulsed laser deposited ZnO thin films on annealing
Proc.14th International Conference on II-VI Compounds, Saint Petersburg, Russia, 23-28 August 2009
15. Naik P.A., Rao B.S., Chakera J.A., Gupta P.D.
Radiation physics aspects in ultra-intense laser-plasma interaction
National Conference on Accelerator and Low Level Radiation Safety, Delhi, November 2009
16. Rajmohan S., Joshi M.P., Dhama T.S., Singh M.P.
Studies on the electrical and optical properties of conjugated organic systems for optoelectronic device application
Winter School on Chemistry and Physics of Materials, Bangalore, December 2009
17. Paul C.P., Pinkerton A.J.* , Mishra S.K., Prem Singh C.H., Ganesh P., Bhargava P., Kukreja L.M.
Laser rapid manufacturing and characterization of porous 316L stainless steel structures
ICALEO 2009, Orlando, USA, 2-5 November 2009
18. Paul P.* , Paul C.P., Kaul R., Sudha C.* , Subba Rao R.V.* Sai Baba M., Dayal R.K.* , Kukreja L.M.
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